## **ABSTRACT**

A method and system for auditing an optical network to identify malfunctioning network elements and to generate a report which would allow skilled personnel to quickly and effectively identify areas of functionality of a deployed network element—that is operating incorrectly by reading through the report. The method involves reading a network element data file and comparing parameters of the file represented by a network interface command line of the file with specified parameters to determine if the network element is operating within valid operating ranges; determining which parameters of the network interface command line are outside valid operating ranges; creating a network element findings file for findings of parameters of the network interface command line which are outside valid operating ranges; and repeating the foregoing steps for data files of all network elements in the network.